

**IN THE UNITED STATES DISTRICT COURT
FOR THE EASTERN DISTRICT OF TEXAS
MARSHALL DIVISION**

SPORTSCASTR INC.
(d/b/a PANDA INTERACTIVE),

Plaintiff,

v.

SPORTRADAR GROUP, AG, and
SPORTRADAR AG,

Defendants.

Civil Action No. 2:23-cv-00472-JRG
(LEAD CASE)

SPORTSCASTR INC.
(d/b/a PANDA INTERACTIVE),

Plaintiff,

v.

GENIUS SPORTS LTD.,
GENIUS SPORTS MEDIA LTD.,
GENIUS SPORTS TECHNOLOGIES LTD.,
GENIUS SPORTS UK LTD.,
GENIUS SPORTS GROUP LTD.,
MAVEN TOPCO LTD.,
MAVEN MIDCO LTD.,
MAVEN DEBT CO LTD., and
MAVEN BIDCO LTD.,

Defendants.

Civil Action No. 2:23-cv-00471-JRG
(MEMBER CASE)

SPORTSCASTR, INC.'S OPENING CLAIM CONSTRUCTION BRIEF

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TABLE OF EXHIBITS

Exhibit	Description
A	February 7, 2025 Michael Shamos Declaration ISO Joint Claim Construction & Prehearing Statement
1	Michael Shamos CV
2	SCSTR PLR 00001 (Beej's Guide to Unix IPC)
3	SCSTR PLR 00004 (RPG IV Socket Tutorial, S. Klement)
4	SCSTR PLR 00009 (Microsoft Computer Dictionary, Fifth Edition)
5	Beej's Guide to Network Programming Using Internet Sockets, Version 3.0.14, Sept. 8, 2009 (GS 00017670-GS 00017778)
6	A Guide to Using Raw Sockets, S. Saxena (available at https://www.opensourceforu.com/2015/03/a-guide-to-using-raw-sockets/)
7	U.S. Patent No. 10,805,687
8	U.S. Patent No. 10,425,697
9	U.S. Patent No. 11,039,218
10	U.S. Patent No. 11,039,218 File History 9-15
11	U.S. Patent No. 11,871,088
12	U.S. Patent No. 11,871,088 File History at 9-15
13	Genius Second Supplemental Invalidity Contentions
14	Genius IPR2024-01305 Petition ('687 Patent)
15	Sportradar IPR2025-00268 Petition ('687 Patent)
16	Microsoft Computer Dictionary, Fifth Edition ("broadcast," "persistent connection," "stream")
17	Genius IPR2024-01308 Petition ('697 Patent)
18	Genius IPR2025-00251 Petition ('088 Patent)
19	Genius IPR2024-01310 Petition ('218 Patent)
20	Sportradar Amended Invalidity Contentions
21	<i>SportsCastr Inc. v. Genius Sports Ltd.</i> , 2:23-cv-00471, Dkt. 69
22	February 7, 2025 email chain between Counsel
23	GS 00025295
24	GS 00025309
25	GS 00024392
26	Genius IPR2024-01309 Petition ('697 Patent)

Plaintiff SportsCastr Inc. d/b/a PANDA Interactive (“PANDA”) submits its Opening Claim Construction Brief for U.S. Patent Nos. 10,805,687 (“’687 Patent”), 10,425,697 (“’697 Patent”), 11,039,218 (“’218 Patent”) and 11,871,088 (“’088 Patent”) (“the Asserted Patents”).

I. DEFENDANTS UNREASONABLE APPROACH TO CLAIM CONSTRUCTION

Defendants identified an unreasonable number of terms (39)¹ for construction, including 21 terms they allege are indefinite. There are only four asserted patents, three of which are related and a fourth that shares much of the same specification and has similar claim language. Many of the terms Defendants seek to construe appear in multiple patents and are alleged to have the same meaning. PANDA repeatedly requested that Defendants reduce the number of terms to a manageable number,² but Defendants refused unless PANDA agreed to drop asserted claims before it was required to do so. Ex. 22, 10 (tying reduction to “16 disputed terms” to PANDA dropping claims before required to do so). Defendants cannot meaningfully brief 40 terms in 30 pages. But since PANDA briefs first, Defendants are able to hide-the-ball on which terms they intend to fully brief. This wait-and-see approach is prejudicial and not within the spirit of the rules.

II. BACKGROUND OF THE ASSERTED PATENTS

All four asserted patents generally disclose and claim systems and processes related to streaming digital content with contextual-matched event information. The ’687, ’218, and ’697 Patents are part of the same patent family and share a common specification. Although the ’088 Patent is in a different family, it shares a similar specification³ and claims similar subject matter,

¹ PANDA identified one term (“event information”) that Defendants did not identify.

² Prior to consolidation, Genius and PANDA submitted a Joint Claim Construction Statement with 16 terms in dispute. Dkt. 124. Defendants cannot explain why that number has nearly tripled.

³ Unless otherwise indicated, citations to one Asserted Patent should also be understood to refer to the corresponding material in the other Asserted Patents.

while in some embodiments adding example modalities for a “single-screen” experience in which event information is overlaid with a broadcaster’s live stream. *See, e.g.*, ’088 Patent, 58:12-33.

The patented technologies improve computer network functionality by facilitating scalable and appreciably low-latency viewing of data streams and event information by using separate channels for the streaming and event information and a one-to-many socket architecture. Particularly in the context of live sports and sports betting broadcasts, a discernible delay between the observation of the event itself and a given broadcaster’s stream would significantly undermine viewer experience. ’218 Patent, 4:42-58. The patented technologies improve the speed of content transfer from broadcaster devices to viewer devices and synchronize content amongst multiple client devices. ’218 Patent, 24:59-25:11.

III. LEGAL STANDARD

This Court is very familiar with the legal standards governing claim construction. *See, e.g., Maxell Ltd. v. Huawei Device USA Inc.*, 297 F. Supp. 3d 668, 677-681 (E.D. Tex. 2018). As such, PANDA will rely on authority where appropriate in discussions for the terms below.

IV. LEVEL OF SKILL IN THE ART

A person of ordinary skill in the art of the Asserted Patents is a person with a bachelor’s degree in electrical engineering, computer engineering, computer science, or equivalent degree and, in addition, approximately two years of work experience with Internet video streaming, Internet communication, and related protocols. *See* Ex. A (M. Shamos Decl.), ¶43.

V. DISPUTED TERMS

A. Terms for Construction

1. “socket” (’697 Patent cls. 1, 2, 4–6, 9, 13, 14, 19–25; ’687 Patent cls. 1, 2, 4, 5, 7, 9, 13, 14, 19–25; ’218 Patent cls. 1–5, 7, 10, 12, 13, 15, 16, 19, 20; ’088 Patent cls. 1, 8, 13, 18, 24, 30)

PANDA's Construction	Defendants' Construction
Plain and ordinary meaning, which is "endpoint for network communications"	plain and ordinary meaning, which is "a network communication endpoint identified by port number and network address"

The parties agree that a socket is an endpoint for network communications. Where they disagree is whether a socket *must* also be identified by "port number and network address." Since it was well-known that sockets need not be so identified, and the specification does not limit embodiments to this narrower set of sockets, Defendants' construction should be rejected.

As an initial matter, both Genius and Sportradar argued in *twenty inter partes* review ("IPR") petitions (Genius filed eight; Sportradar filed twelve) that "a POSA would have understood a 'socket' to be a uniquely addressable communication endpoint on a server where first event information is provided to a [viewer client device]." *See, e.g.*, Ex. 14, 36-37; Ex. 15, 37-38. Notably, *neither* contended that the "communication endpoint" must also be "identified by port number and network address." IPRs use the same claim construction standard as district courts. 37 C.F.R. §42.100(b). Some of these IPRs have been instituted. Defendants cannot justify a broader construction in the IPRs for invalidity and a narrower construction here for noninfringement.

The term "socket" as used in the Asserted Claims has a well-known meaning to a POSITA in networking and computer science as "an endpoint for network communications." Ex. A, ¶¶105, 107 (citing Ex. 3 at -0007, which further explains that a socket is "the virtual device that your program uses to communicate with the network"). Within this field, there are different types of sockets: some that may be identified by a port number and network address, and some that are not. PANDA's expert, Dr. Shamos, identified several examples of the latter, including sockets in well-known Linux and Unix environments, and internet sockets such as "raw sockets." Ex. A, ¶¶106-108 (citing Ex. 2 showing Unix sockets identified by "file descriptor"; citing Ex. 5 showing "raw sockets" identified by "protocol number"; citing Ex. 6 for the statement that "There is no need to

provide the port and IP address to a raw socket, unlike in the case of stream and datagram sockets.”). Dr. Shamos explains that “[p]recisely how a socket is identified, i.e., whether by port and network address, by file path, or by some other means, varies from operating system to operating system, network backend to network backend, and other factors.” *Id.*, ¶107.

The use of the term “socket” in the specification is consistent with its plain and ordinary meaning—*i.e.*, “an endpoint for network communications.” Ex. A, ¶109. For example, Figure 2 illustrates the sockets (e.g., 602A and 604A) of the socket server (600) as endpoints in the communication network that the Viewer Client Devices (e.g., 200A) connect to, and does not require that they be identified in any particular way. The specification similarly describes the “socket” as one endpoint of a communication channel in the network, regardless of how the two endpoints connect to each other. *See* ’218 Patent, 5:54-6:6 (“a second ‘event information’ communication channel (e.g., **between** a particular socket of a socket server and the client device) conveys the event information.”); 20:15-36 (socket servers “facilitate communication,” without any limitations on how sockets are addressed); *see also* 6:54-10:9, 20:52-55, 20:64-21:13, 22:5-58, 22:58-23:3, 23:11-19, FIGS. 21A and 25A (“Connect to Socket”). Ex. A, ¶¶110-111.

None of the embodiments in the specification describe, let alone require, that all sockets in the system must be “identified by port number and network address.” While there are embodiments in which the specification describes “event socket[s]” as using an “EventId” within the path of a URL, these embodiments do not explicitly reference IP address or port number and, in any event, are explicitly described as exemplary rather than limiting. ’218 Patent, 23:43-63 (“***In this situation....***” and “***e.g.***, via a first URL including the first EventID in a path of the URL”); Ex. A, ¶112. Moreover, as shown in Figure 2, the sockets (e.g., 602A) are simply communication endpoints for sending or receiving data across a computer network. Indeed, the specification discloses as an example that “socket server(s) 600” can “establish one or more first event sockets

602A dedicated to the first event information....” ’218 Patent, 20:65-22:4. Again, a POSITA would not have understood this disclosure to require that the socket server must establish an “IP address and port number” for each event information; all that is needed is to establish an “endpoint” for those network communications. Ex. A, ¶¶114-115.

Therefore, since the Asserted Patents do not limit the recited “sockets” to any particular type of computer networking socket, a POSITA would have understood that the claims can apply to any type of computer socket. *Epistar Corp. v. Int’l Trade Comm’n*, 566 F.3d 1321, 1334 (Fed. Cir. 2009) (holding that there is a “heavy presumption that claim terms carry their full ordinary and customary meaning” absent a showing that “the patentee expressly relinquished claim scope”).

2. “event socket” (’697 Patent cls. 1, 2, 4–6, 9, 13-14, 19–25; ’687 Patent cls. 1, 2, 4, 5, 7, 9, 13-14, 19, 20, 22-23, 25; ’218 Patent cls. 1–5, 7, 12-13, 16, 19-20)

PANDA’s Construction	Defendants’ Construction
“socket through which event information can be sent in a synchronized manner to multiple client devices”	“a socket dedicated to a particular event”

The parties agree that “*event socket*” is not itself a term of art and requires a construction. The specifications make clear that the function is what determines whether something is an *event socket*: *i.e.* it is a socket “through which event information can be sent in a synchronized manner to multiple client devices.” Defendants’ construction improperly imports non-limiting terms from the specification to require these sockets be “dedicated to a particular event.” This reads out examples in the specification and is not necessary to achieve the purposes of the claims.

Here again, Defendants contradict the construction they proposed in their IPR petitions. In the IPRs they argued: “A first event socket corresponding to the first event information germane to the first live sporting event ***is a socket where information about one sporting event is provided to a [viewer client device].***” Ex. 14, 37; Ex. 15, 38. They never argued that the “*event socket*” must also be “dedicated to a particular event,” only that it provides information about one sporting event.

Nor could they. The specifications make clear that any given socket need not be dedicated only to a single event, as Defendant’s litigation-inspired construction mandates. Ex. A, ¶116.

First, while an “*event socket*” certainly can be dedicated to a particular event, the specifications does not foreclose that socket from also being dedicated to another event, for example through the use of two separate event information channels within the same socket. The specifications consistently recite that “all viewers (and broadcasters) of the event, regardless of which live stream they may be generating or watching, connect to ***one or more*** sockets of a socket server that is/are dedicated to the event, such that all live streams relating to the event are similarly synchronized to event information and updates to the same.” *See, e.g.*, ’218 Patent, 27:8-13, 27:37-44, 47:20-24; Ex. A, ¶117.

Second, the specifications distinguish between “event sockets” and “event information channels.” Here, Defendants’ citations in the Joint Claim Construction Statement (JCCS) focus on the embodiments in Figures 2 and 3. While these embodiments discuss one or more “event socket” “that is/are dedicated to the event,” the embodiments disclosed in Figures 6 and 16 clarify that an “event socket” can have more than one “event information channel,” and that it is the “channel” (not the socket) that may be dedicated to an event, thus permitting the other channel to be dedicated to a different event. *See* ’218 Patent, 27:1-7 (“event information and updates to event information are provided to broadcaster client devices and viewer client devices via a ***socket-based ‘event information channel’ dedicated to the event.***”); 23:52-63 (describing both a “***first*** event information Internet communication channel” and “a ***second*** event information Internet communication channel...between ***the one or more first event sockets*** 602A”). Nothing in the specifications or claims forecloses “event sockets” from being dedicated to more than one event, for example via two separate event information channels dedicated to two different events. Ex. A, ¶118. And even if Figures 2 and 3 disclosed such an embodiment (they do not), it would be

improper to limit claims to those examples. *Liebel-Flarsheim Co. v. Medrad, Inc.*, 358 F.3d 898, 906 (Fed. Cir. 2004) (“Even when the specification describes only a single embodiment, the claims of the patent will not be read restrictively unless the patentee has demonstrated a clear intention to limit the claim scope using ‘words or expressions of manifest exclusion or restriction.’”).

In contrast, PANDA’s proposed construction, which requires a “socket through which event information can be sent in a *synchronized* manner to *multiple* client devices,” is consistent with the claims and specifications, and is faithful to the stated purpose of the claimed inventions. Ex. A, ¶119. For example, the specification states that a “technical challenge” overcome by “the inventive concepts disclosed herein” is “to provide the same event information, in a synchronized and low-latency manner to all...broadcasters and viewers interested in following the same event.” ’218 Patent, 26:39-56. The inventive solution that allows multiple viewers of an event to receive “*the same event information*” is a “*socket-based ‘event information channel’ dedicated to the event*” that allows “*all viewers...*of the event, regardless of which live stream they may be...watching,” to receive the same event information. *Id.*, 27:1-12. The purpose of the “event socket” in the claims is, in other words, to send information in a synchronized manner to multiple viewers, who access that information via their client devices. *Id.*, 27:1-12, 20:24-30; Ex. A, ¶119.

In short, the intrinsic record makes clear what an “event socket” is (*i.e.*, a “socket through which event information can be sent in a synchronized manner to multiple client devices”). Defendants’ construction directly contradicts embodiments in the specification, and in any event, imports limitations that are not necessary nor required by the specification or claims.

3. “socket server” (’697 Patent, cls. 1-2, 4-6, 9, 13-14, 19-25; ’687 Patent, cls. 1-2, 4-5, 7, 9, 13-14, 19-25; ’218 Patent, cls. 1, 3-4, 7, 10, 12, 15-16; ’088 Patent, cls. 1, 4-5, 8, 13, 18, 24, 28-30)

PANDA’s Construction	Defendants’ Construction
Plain and ordinary meaning	“a server in which a socket is dedicated to a single event”

Defendants import their construction for “event socket” (*i.e.*, “a socket dedicated to a particular event”) into this term such that any “socket server” must also include an “event socket.” As explained above, since there is no requirement that all “event sockets” must be “dedicated to a single event,” there is no reason to limit all “socket servers” to having such a socket. Moreover, the claims state whether the “socket server” has an “event socket” or not. *Compare* ’697 Patent, claim 1 (“...between at least one **first event socket** of the at least one socket server...”) with ’088 Patent, claim 1 (“...connect to a **first socket** of a socket server...”). There is no reason to read these requirements into “socket server.” The term should have its plain and ordinary meaning.

4. “event information” (’697 Patent cls. 1, 3, 4, 6, 19, 20, 22, 23, 27; ’687 Patent cls. 1–4, 7, 9, 19, 20, 22, 23, 25, 27, 29; ’218 Patent cls. 1, 3, 4, 6, 7, 11, 12, 15, 30; ’088 Patent cls. 1, 5–8, 11–13, 15–27, 29–34)

PANDA’s Construction	Defendants’ Construction
Plain and ordinary meaning, which includes “information about a particular event, including but not limited to one or more of team information (e.g., team names, abbreviations and/or logos), score information (e.g., with essentially real-time score updates synchronized with the video-based commentary), player information, venue information, game status information (e.g., on-base, at-bat, timeouts, fouls, pole position, yards-to-go, yards-to-goal, down), team statistics, player statistics, alerts, trivia, polls, news, broadcaster and/or viewer messages, and/or advertising associated with or relevant to the event, a participant in the event, a location of the event, a date/time of the event.”	plain and ordinary meaning/no construction required

The parties do not appear to dispute the meaning of the term, only whether a jury will benefit from a clarifying explanation illustrating the full scope of this term. PANDA’s construction uses a combination of the elements included in “event information” from two references in the specification. ***First***, the specification states that “event information may include, but is not limited to, one or more of team information...score information...player information, venue information, game status information...team statistics, player statistics and the like.” ’697 Patent, 4:48–55. ***Second***, the specification provides components of “event information” while discussing “real-time

data.” *Id.*, 14:1. This data “*may include* but is not limited to alerts, statistics, trivia, polls, news, broadcaster and/or viewer messages, and/or advertising associated with or relevant to the event, a participant in the event, a location of the event, a date/time of the event, etc.” *Id.*, 14:4–8.

By combining the specification’s two descriptions of “event information,” a jury is better apprised of what “event information” is in the context of the Asserted Claims to “intelligently determine the [infringement] questions presented” at trial. *Eon Corp. v. Silver Spring Networks, Inc.*, 815 F.3d 1314, 1319 (Fed. Cir. 2016). Further, this construction ensures that a jury would not read “event information” as overly narrow (*e.g.*, limited to a colloquial definition such as score information or team name only), where the patent expressly contemplates additional information.

5. “broadcaster” (’697 Patent cls. 1-3, 5-6, 10-17, 19, 21-24, 26-28, 30; ’687 Patent cl. 12)

PANDA’s Construction	Defendants’ Construction
Plain and ordinary meaning	“a registered user (a user that provides profile information and validation credentials to establish a user account so as to access, via a login process using the validation credentials, the one or more of the various servers and corresponding server functionality), that creates/provides video and/or audio (also referred to herein in some instances as “video-based commentary”) for consumption by one or more viewers.”

Broadcaster should have its plain meaning. A claim term is only given a special definition different from its plain meaning if the “patentee...clearly set[s] forth a definition of the disputed claim term other than its plain and ordinary meaning” or disavows claim scope. *Thorner v. Sony Comput. Entm’t Am., LLC*, 669 F.3d 1362, 1365-66 (Fed. Cir. 2012). Neither situation applies. Moreover, Defendants used the plain and ordinary meaning in the IPRs. *See* Ex. 17, pp. 23-24.

“Broadcaster” is a term well-known in the art. For example, Microsoft Computer Dictionary concisely defines “broadcast” as “[s]ent to more than one recipient.” Ex. 16. Therefore, a POSITA would readily understand that “broadcaster” refers to a person who sends content to more than one recipient.

The specifications and claims use the term “broadcaster” in the same way. For example, the claims simply recite that the broadcaster sends digital content to media servers, which then send the content to client devices. *See, e.g.*, ’697 Patent, cl. 1 (“receive the first broadcaster's live stream of digital content and the second broadcaster’s live stream of digital content”). The specifications describe “broadcasters” (and “broadcast”) in the same manner: “the present disclosure relates generally to inventive systems, apparatus, and methods for facilitating *one or more broadcasters to create/provide video and/or audio (also referred to herein as a “broadcast”)* and allow one or more viewers to consume the video and/or audio....” ’697 Patent, 2:48-57. The figures and related descriptions are all consistent with the plain and ordinary meaning: *i.e.*, broadcaster devices (100A, 100B) sending streams of content that are received by multiple client devices. *Id.*, Figures 1A, 2, 6; *see also id.*, 15:30-36, 16:14-21.

In contrast, Defendants manufacture a complex and confusing, litigation driven construction by cobbling together the introduction of two terms (*i.e.*, “broadcaster” and “registered user”) in a “Glossary” section and erroneously treating the introduction as definitional. ’697 Patent, 7:36-40, 7:44-47; Dkt. 124, 28. They specifically require that any “broadcaster” must be a “registered user,” and that a “registered user” must provide “profile information” and “validation credentials” to access the servers. In so doing, Defendants ignore the rest of the intrinsic evidence, which makes clear that the patentee was not redefining the term. Moreover, if defendants’ purported logic is taken to the extreme, it would create absurd results. For example, in Defendants’ proposed construction, the terms “user” and “viewer” are also introduced in the “Glossary” section, and the description of “viewer” further includes the term “live stream” that is again introduced in the Glossary section. Plugging all these introductions into Defendants’ proposed construction would result in a paragraph that would unnecessarily and likely confuse a jury.

In any event, as shown above, throughout the specifications, the patentee consistently used

the term “broadcaster” and “broadcast” consistent with its plain and ordinary meaning—and certainly never required the broadcaster’s to be “registers users.” In fact, the specifications disclose an example embodiment in which a database 420 “stores user profiles for *broadcasters and viewers*, in which the user profile may include a user type (*e.g.*, registered user, *anonymous user*, subscriber of one or more broadcasters, VIP user, media professional or media member, etc.).” ’697 Patent, 32:50-54, FIG. 6. Therefore, broadcasters can also be anonymous users, thereby contradicting Defendants’ proposed construction that requires a “broadcaster” to be a “registered user.” In view of the entirety of the specification, the glossary section in the specification merely serves as a generalized introduction of the terms, instead of a “definitional statement.” *Baxalta Inc. v. Genentech, Inc.*, 972 F.3d 1341, 1347 (Fed. Cir. 2020) (holding that the language “[a]ntibodies are” should be read “as a generalized introduction to antibodies rather than as a definitional statement” because the specification discloses embodiments in which antibodies are used differently from the purported definition).

6. “live stream of digital content” / “stream of digital content” (’697 Patent cls. 1-3, 5-6, 10-17, 19, 21-24, 26-28, 30; ’687 Patent cls. 1-3, 5-7, 10-17, 19, 21-23, 26-27, 30; ’218 Patent cls. 12, 14-16, 18)

PANDA’s Construction	Defendants’ Construction
Plain and ordinary meaning	“digital video and/or audio transferred between at least two network-connected devices in real-time or essentially real-time as created/provided by a broadcaster”

The concept of “live streaming” is well-known in the art and does not require further construction. Indeed, the patent explains that 1) video streaming has been around since 2007; 2) there has been a “proliferation of live video streaming over the internet”; and 3) the problems with then-existing technology and latency issues. ’697 Patent, 1:62-2:47. And again, Defendants used the plain and ordinary meaning in the IPRs. *See* Ex. 17, pp. 23-24.

Computer dictionaries provide a general definition of “stream” as “any data transmission,

such as the movement of a file between disk and memory, that occurs in a continuous flow.” Ex. 16 (“stream”); *see also id.* (“streaming” is “[o]n the Internet, the process of delivering information, especially multimedia sound or video, in a steady flow that the recipient can access as the file is being transmitted”). The specifications use the term consistently with the plain and ordinary meaning, describing streaming as simply sending digital content in a continuous flow. ’697 Patent, 2:65-3:34, 8:16-47, 9:16-10:43, 13:16-35, 14:64-15:58, 20:62-21:36, 24:6-37, 25:35-45, 30:39-53, 50:36-56, 52:47-62, FIGS. 1A, 2, 3, 4A-4B, 20A-20B, 22A-22B, 23A-23B, 24A-24B, 25A-25C.

Defendants improperly import non-limiting language from the specification even though the patentee did not clearly set forth their own definition of the terms or disavow their scope. *Thorner*, 669 F.3d, 1365-66. Defendants again erroneously treat the generalized introduction in the “glossary” section as definition. Their proposed definition has numerous issues.

First, Defendants erroneously change the term “digital content” in the claims to “digital video and/or audio.” But the intrinsic evidence, including the sections Defendants cite, use the signal “e.g.” to illustrate that “digital video and/or audio” are just examples of digital content. ’697 Patent, 8:22-26. In fact, “digital content” may include any information created and shared in a digital format, such as “a live ticker, closed captioning, and real-time text.” *Id.*, 13:25-27

Second, the specification discloses various embodiments where “live stream of digital content” does not require all the details in Defendants’ proposed construction. For example, in one implementation, live streaming does not require a “broadcaster” at all. ’697 Patent, 13:16-35. In another example, FIGS. 25A-25C and their associated descriptions “show a process flow illustrating a mobile client live stream *replay* method.” ’697 Patent, 12:51-53; *see also id.*, 3:18-21. In this embodiment, the live stream can be replayed and therefore does not require that the digital content is transferred “as the digital content is created/provided by a broadcaster,” thereby contradicting Defendants’ construction. Thus, in view of the whole specification, the “glossary”

section merely serves as generalized introduction instead of a definition. *Baxalta*, 972 F.3d at 1347.

Finally, similar to the “broadcaster” term discussed above, taking Defendants’ plugging-in logic to the extreme would create absurd results. For example, in Defendants’ proposed construction, the term “broadcaster” is also introduced in the “glossary” section, and the description of “broadcaster” further includes the terms “registered user” and “viewer” that are introduced in the “glossary” section. Plugging all these introductions into Defendants’ proposed construction would result in a paragraph that would likely and unnecessarily confuse a jury.

7. “persistent connection” (’697 Patent cls. 16, 17; ’687 Patent cls. 16, 17; ’218 Patent cls. 3, 20, 24)

PANDA’s Construction	Defendants’ Construction
Plain and ordinary meaning	“a continuous and uninterrupted connection”

The term “persistent connection” has a plain and ordinary meaning in the art, as evidenced by the Microsoft Computer Dictionary providing an example definition of “[a] connection to a client that remains open after a server sends a response.” Ex. 16. The dictionary even provides a reason for such connections: “to improve Internet efficiency and performance by eliminating the overhead associated with multiple connections.” *Id.* The specifications and claims use this term consistent with this general understanding. ’697 Patent, 15:36-51, 20:45-48, 38:41-46, 51:39-45.

In contrast, Defendants inject additional requirements of a “continuous” and “uninterrupted” connection that are not found in the specification. In fact, the term “uninterrupted” does not appear at all. Moreover, Defendants have not explained what a “continuous and uninterrupted connection” means in this context. For example, if a connection is interrupted because of a power outage or other network issue, does that transform a “persistent connection” into a non-persistent connection? There is simply no basis to inject this ambiguity into the claims.

Defendants appear to base their construction on a description of various protocols that provide for “continuous *streaming* over the Internet” of digital content (not a “continuous

connection” between network components). ’697 Patent, 15:30–58. But how a “continuous stream” is provided does not redefine the underlying connection between the components. In fact, that portion of the specifications states that a “persistent connection” is just an example (using “*e.g.*,”) of how a “continuous stream” may be provided, indicating that other types of connections (*i.e.*, non-persistent) can also be used. Thus, the “continuous” language relates to a “*stream*,” and does not define a “persistent *connection*.” Defendants’ other citations also do not redefine persistent connections or disavow claim scope. ’697 Patent, 33:34–55 (explaining that conventional HLS may not use “persistent connections”); 40:62–41:37 (same); 42:17–34 (simply stating that a “persistent connection” is established). None of these sections describe requirements of a “persistent connection;” and do not require a “continuous and uninterrupted connection.”

8. “online gaming information” (’218 Patent cls. 1, 3-4, 6-7, 12, 16, 21, 23, 25, 27, 29; ’088 Patent cls. 6, 11, 16, 22, 26, 33)

PANDA’s Construction	Defendants’ Construction
Plain and ordinary meaning	“information about a video game played over the Internet”

The specifications and claims of the ’218 and ’088 Patents use the term “online gaming information” consistent with its plain meaning of the term—*e.g.*, information used for, or relevant to, gaming conducted over the Internet. A jury will have no difficulty determining whether information meets this non-technical concept.

Defendants improperly seek to limit this term to a specific type of online gaming information: “***video games played*** over the Internet.” Defendants appear to base their position entirely on a parenthetical that mentions “online gaming” along with “board games, chess matches, role-playing games” as examples of “game-related activities.” ’218 Patent, 4:31-33, 8:16-18. But this disclosure does not redefine the term “online gaming”—it simply provides various examples of “gaming-related activities.” It certainly does not limit online gaming to “video games,” a term which does not appear in the specifications at all.

In fact, the claims themselves make clear that “online gaming” can also relate to live events and other games (*i.e.*, not video games alone). For example, claim 1 of the ’218 Patent recites that “first event information” is germane to a “first sporting event,” and then further recites that this “first information” includes “online gaming information,” confirming that “online gaming information” can relate to a sporting event and is not limited to video games:

A) a control server to periodically retrieve, via the Internet, the *first event information germane to the first sporting event*;

B) at least one socket server...to: receive from the control server at least the first event information; and transmit at least some of the *first event information, including the online gaming information* ...

The specification explains that “instructions cause the display to render a video relating to a sporting event and also render online gaming information relating to the sporting event.” ’218 Patent, Abstract. In fact, the title of the ’218 Patent is “for rendering digital content relating to a sporting event with online gaming information.” Thus, the intrinsic evidence makes clear that “online gaming information” is not limited to “video games played over the Internet.”

Finally, Defendants again contradict their IPR petitions despite applying the same claim construction standard. 37 C.F.R. §42.100(b). Defendants argued that “meta-data” for “the status of each car and driver in the race” (*i.e.*, a real sporting event, not a video game), such as “lap number, car speed and acceleration,” includes “online gaming information.” Ex. 19, 56-57. This direct contradiction shows that Defendants’ current attempt to limit “online gaming information” is an inconsistent and unsupported litigation-inspired construction that should be rejected.

B. Preamble Terms

The parties’ dispute whether preambles in the independent claims of the ’687, ’697, and ’218 Patents are limiting. Preambles can limit claim scope *only* “if [they] recite essential structure or steps, or if ... ‘necessary to give life, meaning, and vitality’ to the claim.” *Catalina Marketing*

Int'l, Inc. v. Coolsavings.com, Inc., 289 F.3d 801, 808 (Fed. Cir. 2002) (quotations omitted). A preamble is not limiting, however, “when the claim body describes a structurally complete invention such that deletion of the preamble phrase does not affect the structure or steps of the claimed invention,” *Catalina*, 289 F.3d at 809. And “structures that are referred to in a preamble”—such as those used for antecedent basis—“may merely provide ‘reference points ... that aid in defining’ the claimed invention,” and therefore do not recite *essential* structure to the claim. *Whirlpool Corp. v. TST Water, LLC*, No. 2:15-CV-1528-JRG, 2016 WL 3959811, at *6 (E.D. Tex. July 22, 2016) (quoting *C.R. Bard, Inc. v. M3 Sys., Inc.*, 157 F.3d 1340, 1350 (Fed. Cir. 1998)). A preamble is also not limiting when “the preamble [is used] only to state a purpose or intended use for the invention,” *Rowe v. Dror*, 112 F.3d 473, 478 (Fed. Cir. 1997), “even where the body of the claim relied on the preamble for antecedent basis.” *Civix-DDI, LLC v. Cellco P’ship*, 387 F. Supp. 2d 869, 890 (N.D. Ill. 2005) (citing *Bristol-Myers Squibb Co. v. Ben Venue Labs., Inc.*, 246 F.3d 1368 (Fed. Cir. 2001)).

As shown below, none of the preambles provide essential structure or otherwise breathe life into the claims. Indeed, nearly all of the terms referenced in each preamble are fully set forth in the body of the claim, providing a structurally complete invention. Any remaining terms merely state purposes or intended uses. Therefore, they are not limiting.

Defendants have signaled they intend to brief all preambles as a single issue. This is improper. Preambles are presumed to be non-limiting and to the extent that presumption is overcome it is because a *particular* preamble adds necessary meaning to the *particular* claim it precedes. PANDA reserves the right to address any particularized arguments in its reply brief. Moreover, even if a blanket approach were appropriate, it would fail.

1. ’687 Patent (cls. 1, 19, 23, 27) and ’697 Patent (cls. 1, 19, 23, 27)

None of the preambles of the '687 and '697 Patents are limiting because each recites only an intended use of an otherwise structurally complete invention. As an initial matter, each claim recites either “a system *for*” or a “method *for*,” indicating that what follows is an intended use of that system or method. Indeed, each preamble is then followed by “comprising” language, and then a recitation of each component or element necessary for that system or method. As such, the preambles are not necessary to “breathe life into the claims” and are therefore not limiting.

The '687 and '697 Patent preambles describe a system or method for sending a first live stream to a first set of viewer client devices and a second live stream to a second set of viewer client devices. This does not recite an “essential structure or steps” of the claim—indeed, these do not recite structural components of the method or system at all (*e.g.*, the media sources, servers, and sockets, etc.) other than client devices. Moreover, each of the of the elements described in the preamble (including the plurality of first/second viewer client devices; first/second first live stream of digital content”) are spelled out in claim limitation A. The preambles are therefore not limiting because “the claim body describes a structurally complete invention such that deletion of the preamble phrase does not affect the structure or steps of the claimed invention.” *Id.*

The only remaining terms in the preambles not expressly recited in the claims reference the “live stream of digital content” relating to a “first [or second] live sporting event” and, for the '697 Patent, “first/second broadcaster client device.” However, these terms merely state “a purpose or intended use for the invention”—it is for those who provide live streams of sporting events. *Id.* In contrast, the claimed invention—systems/methods of conveying low-latency data about a sporting event (such as stats or betting odds)—are structurally complete and might be equally useful to someone providing a live stream of some *other* type of digital content, whether from a broadcaster client device or other device. The preamble’s discussion of one use does not foreclose the other. *See Artic Cat Inc. v. GEP Power Prods., Inc.*, 919 F.3d 1320, 1328 (Fed. Cir. 2019)

(“preambles are not limiting because the bodies of [the claims] describe structurally complete inventions and the preambles refer to a persona recreational vehicle only as an intended use”).

2. ’218 Patent (cls. 1, 12, 16)

None of the preambles of the ’218 Patent are limiting because each recites only an intended use of an otherwise structurally complete invention. Again, each claim recites either “a system *for*” or a “method *for*,” indicating that what follows is an intended use of that system or method. Indeed, each preamble is then followed by the “comprising” language, and then a recitation of each component or element necessary for that system or method. As such, the preambles are not necessary to “breathe life into the claims” and are therefore not limiting.

The ’218 Patent preambles describe a system or method for either “controlling a [plurality of / first] viewer client devices” to either “receive digital content” (claim 1) or “display a video” (claim 16) “relating to a first sporting event” or “providing . . . first event information germane to first sporting event” (claim 12). None of them recites an “essential structure or step” of any claim—indeed, the preambles do not recite structural components of the method or system at all (*e.g.*, servers, event sockets, web servers, and communication channels, etc.) other than client devices. Moreover, each of the of the elements described in the preamble (including the viewer client devices; online gaming information, and first information germane to sporting events) are spelled out in the claim limitations. Indeed, there are no elements in the preambles that are not recited in the claims themselves. The preambles are therefore not limiting because “the claim body describes a structurally complete invention such that deletion of the preamble phrase does not affect the structure or steps of the claimed invention.” *Id.*

C. Means-Plus-Function (§ 112(f)) Terms (’697 Patent cls. 19, 27, 28, 29, 30; ’687 Patent cls. 27, 28, 29 30)

The parties agree that each of these terms is subject § 112(f). Defendants argue that *every*

means-plus-function term in the claims is indefinite because the specification does not provide adequate structure for the recited functions. In each case, Defendants are wrong.

1. “means for transmitting the first [event/score] information to at least the first viewer client device . . . ” (’687 Patent cl. 27; ’697 Patent cl. 27)

PANDA’s Construction
<p>Subject to § 112(f); not indefinite.</p> <p>Function: transmitting the first [event/score] information to at least the first viewer client device via a first event information communication channel that is different from the first video communication channel.</p> <p>Structure: a socket of a socket server that implements one or more of the algorithms described in corresponding portions of FIGs. 2, 3, 21A-21E, and accompanying disclosures, including 5:29-44, 9:16-10:43, 19:64-20:61, 21:37-22:67, 23:20-45, 26:50-27:27, 29:25-43, 46:61-47:11, 51:27-49, 53:21-37 of the ’697 Patent, and equivalents thereof.</p>

The “means for transmitting” terms are not indefinite because the specification discloses sufficient structure corresponding to this “means for transmitting” term. Here, the recited functions of claim 27 of the ’687 Patent and claim 27 of the ’697 Patent are identical, except the ’687 recites “event information” and the ’697 recites “score information.” As shown below, the corresponding structure is the same in each case. Moreover, PANDA’s expert, Dr. Shamos, has submitted un rebutted testimony confirming that a POSITA would recognize the disclosure of structure in the specification as sufficient. Ex. A, ¶¶ 95-100.

In particular, Figures 2 and 3 of the ’697 Patent illustrate a socket server labelled as 600 and configured to perform the claimed function, *i.e.*, transmitting the first event/score information to at least the first viewer client device via a first event information communication channel that is different from the first video communication channel. ’697 Patent, FIG. 2, 9:16-10:43, 19:64-20:61; Ex. A, ¶96. In addition, Figures 21A-21E, 22A-22B, 23A-23B, 24A-24B, and 25A-25C, as well as the accompanying disclosures (*e.g.*, 5:29-44; 9:16-58; 19:64-20:61; 22:7-67; 23:46-24:5; 26:50-27:27; 29:44-30:29; 51:27-52:3; 52:47-62; 52:63-54:11 of the ’697 Patent) describe in detail

how the socket server transmits/receives various types of event information, including chat information, to viewer client devices.

The specification also discloses several different algorithms that can be implemented by the socket server to perform the claimed function. *See, e.g.,* '697 Patent, 23:20-45; 26:50-27:27; 46:61-47:11; 51:27-49. Ex. A, ¶96. Accordingly, a POSITA, after reviewing the entirety of the specification, would understand that the specification discloses sufficient structure corresponding to the claimed function. Ex. A, ¶¶95-96 and 99.

Defendants' argument that this term lacks sufficient structure is undermined by Genius' prior agreement that the specifications have corresponding structure for the term "means for transmitting and receiving first *chat information* regarding the first live sporting event via at least one first chat/system event Internet communication channel that is different from the first video communication channel and the first event information channel." Ex. 21, 3-4. The specification also expressly provides that the *chat information* can be distributed similar to the *event information* recited in this "means for transmitting" term. *See, e.g.,* '697 Patent, 22:7-39. Thus, the corresponding structure of the "means for transmitting" term at least includes the corresponding structure of the "means for transmitting and receiving."

2. Remaining Means-Plus-Function Terms

Defendants allege that *seven* more means-plus-function terms are indefinite for lack of sufficient structure for the claimed function. Dkt. 124, pdf pp. 21-28 (Terms 18-24). As noted above, Genius previously agreed that these additional terms were not indefinite, and further agreed with PANDA's prior constructions. Ex. 21, 2-5. Motive's constructions and identification of the structure corresponding to the recited functions are set forth in the JCCS statement. In addition, PANDA's expert explains why the specifications provide sufficient structure for each of those

functions. Ex. A, ¶¶88-104. Dr. Shamos’ opinion is un rebutted. Further, neither Defendant had any issue understanding the scope of this claim in their IPR petitions. Exs. 14, 17. Defendants cannot meet their burden of showing these claims are invalid.

D. Additional Terms Alleged To Be Indefinite

Defendants allege that an additional *eleven* terms are indefinite. But the Defendants cannot meet their burden because PANDA’s expert’s testimony that the claims are not indefinite stands un rebutted. Courts have found that a party has not met its burden of proving indefiniteness where it “does not provide or rely upon any expert for its proposition that the term is indefinite or that one of ordinary skill in the art would not be reasonably certain as to the scope of [the] claim element.” *Freeny v. Murphy USA Inc.*, No. 2:13-CV-791-RSP, 2015 WL 294102, at *14 (E.D. Tex. Jan. 21, 2015); *see also Luminati Networks Ltd. v. BIScience Inc.*, No. 2:18-CV-483-JRG, 2019 WL 6683268, at *9 (E.D. Tex. Dec. 6, 2019) (party “did not provide expert testimony on the issue and thus cannot meet the clear-and-convincing standard” of proving the claim indefinite); *Akzo Nobel Coatings, Inc. v. Dow Chem. Co.*, 811 F.3d 1334, 1345 (Fed. Cir. 2016) (“no evidence to show that a person of ordinary skill in the art would not know with reasonable certainty the steps to which the limitation in [the claim] applies.”).

In any event, Defendants’ failure to present expert evidence here is understandable because the scope and meaning of each of the challenged terms is readily understandable to a POSITA.

1. The Synchronization / Latency Terms Are Not Indefinite

Disputed “Synchronization Terms”
“the at least one socket server transmits the changes in the online gaming information to the first viewer client device and the second viewer client device via the first event socket to provide a single synchronized update and mitigate client by-client latency and/or synchronization issues” (’218 Patent cl. 7)
“the first digital content received at the first client device and the second client device is synchronized and client-by-client latency between the first client device and second client device to render the first event information is thereby mitigated or significantly reduced” (’088 Patent cl. 1, 8)

Disputed “Synchronization Terms”

“such that the online gaming information is shared in a synchronized manner by the first viewer client device and the second viewer client device.” (’218 Patent, cl. 4)
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A POSITA would understand the “synchronization terms” with reasonable certainty because: (1) they are not terms of degree—the claims describe how latency and synchronization are mitigated or significantly reduced; and (2) even if they are terms of degrees, a POSITA would understand their bounds based on their knowledge and the guidance the specification provides as to the “objective boundaries” that inform a POSITA of their scope with reasonable certainty. *Interval Licensing LLC v. AOL, Inc.*, 766 F.3d 1364, 1371 (Fed. Cir. 2014). Again, Defendants had no issue understanding these terms in their IPR petitions. Exs. 18, pp. 40-41; 19, pp. 53, 58.

As an initial matter, the concepts of “latency” and “synchronization” are understood in the art, as evidenced by the dictionary definitions that Defendants identified describing both concepts. *See* Ex. 23 (“synchronization” terms); Ex. 24 (“latency”); Ex. 25, 394; Ex. A, ¶¶54, 61. The claims also make clear that “client-by-client” latency is “between the first client device and second client device to render the first event information.” The specifications and claims use these terms consistent with their understood meanings.

The Defendants appear to take issue with these terms based on a hyper-technical argument concerning absolute values of latency and synchronization. However, a POSITA would understand that the synchronization/latency concepts in the claims concern sharing the same information to each viewer client device at around the same time. Ex. A, ¶¶46-50. In this context, the claims recite a change of latency (*e.g.*, “mitigated” or “reduced”)—*i.e.*, a relative term, not an absolute measure. For example, the specification provides guidance as to the desired result for the synchronization: “viewer client devices ... would receive the *same event/score information* for the first live sporting event in a synchronized manner from the socket server(s).” ’218 Patent, 23:60-63, 28:17–22

(providing an example of events that are not synchronized when a first viewer is “actually seeing the video content some time *earlier than or later than* a second viewer”); Ex. A, ¶¶47-49.

The above description is consistent with the well-known concept in computer networks of synchronization relating to two (or more) things occurring at the same time. *See* Ex. 4, 00011. Of course, as Dr. Shamos explains, a POSITA would understand that in any transmission or computer application, at the smallest time scales, no two events can happen at precisely the same time. However, a POSITA would have no issue determining if two (or more) events or occurrences are synchronous based on the system itself and the purpose of the synchronization. Ex. A, ¶50.

Furthermore, the claims and specifications teach a POSITA the processes that mitigate and significantly reduce client-by-client latency and/or synchronization issues. For the '218 patent, claim 7, the claim recites that “single synchronized update” will “mitigate client-by-client latency and/or synchronization issues.” Ex. A, ¶53. Examples of such processes are described in detail in the specification. *See* '218 Patent, 27:23-45 (“The technical challenge of displaying event information and updates to same in a synchronized and low-latency manner amongst multiple viewers.... Once a change in event status has been detected (e.g., if a play clock updates), the control server provides these changes to the one or more sockets dedicated to the event (to which all viewers and broadcasters of video-based commentary regarding the event are communicatively coupled), **resulting in a single synchronized update to all client devices and thereby significantly mitigating client-by-client latency and/or synchronization issues.**”); *see also id.* at 7:1-25; 23:38-63; Ex. A, ¶¶50-53, 55-56. Similarly, the same disclosure (replicated in the '088 Patent, 26:54–27:9) provides guidance to a POSITA as to how the “the first digital content received at the first client device and the second client device [are] synchronized” and therefore “client-by-client latency between the first client device and second client device to render the first event information is thereby mitigated or significantly reduced” ('088 Patent, cl. 1, 8). Ex. A, ¶53.

Thus, these are not terms of degree, as Defendants argue, and a POSITA would understand that, in this context, there is no need for further analysis to determine the scope and amount of that mitigation. But even if there were a need, a POSITA would have no issue applying the above teachings and standards to determine whether such a synchronized update would mitigate any client-to-client latency or synchronization issues, which are issues known to a POSITA. Ex. A, ¶¶52-53. And as Dr. Shamos explains, the specification provides examples of the type of reduction that is significant, and a POSITA would understand with reasonable certainty whether a reduction is significant, in view of the system and content provided. Ex. A, ¶¶53-54.

But even if the “synchronization terms” are treated as a term of degree (which they are not), the specification provides “objective boundaries” to define their scope. For example, the specifications provide relative and absolute exemplary values of the “mitigated or significantly reduced” latency. *See, e.g.*, ’088 Patent, 25:56–67 (describing RTMP CDN servers that “introduce appreciably low latency (e.g., on the order of less than 150 milliseconds),” “appreciably low latency introduced by the media servers and RTMP CDN (e.g., on the order of about 500 milliseconds or even less),” and “client-introduced digital content latency (e.g., on the order of about one-to-two seconds for continuous streaming consumers)”; ’088 Patent, 40:18–21 (“significantly reduced HLS latency of approximately 8 to 12 seconds” as compared to a “conventional HLS latency on the order of 100 seconds”); Ex. A, ¶57. The specification also provides clear guidance as to the exemplary upper and lower bounds for latency. *See, e.g.*, ’088 Patent, 24:45–50 (broadcaster-to-viewer delay time on the order of ten seconds or less, or on the order of two-to-three seconds or less); 28:18-22 (“respective viewers of a given broadcast may be out of synchronization with one another by less than approximately *one or two seconds at most*”); Ex. A, ¶¶58-60. Therefore, the exemplary values and upper/lower bounds of mitigated or significantly reduced latency provide clear guidance to a POSITA.

Furthermore, during prosecution of the '088 and '218, both Examiners had no issue understanding the terms at issues; in fact, the Examiner allowed the patented claims promptly after an interview with the Applicant (Ex. 12, 13-15; Ex. 10, 2-3), further demonstrating that the “mitigation” and “reduction” terms are not indefinite. *Sonix Tech. Co. v. Publ'ns Int'l, Ltd.*, 844 F.3d 1370, 1379–81 (Fed. Cir. 2017) (holding that it is highly relevant that the examiner understood this phrase throughout prosecution).

2. “transmit at least the first score information the at least some of the first event information....” ('697 Patent cl. 19)

Defendants allege that claim 19 of the '697 Patent is indefinite because of a minor typographical error—omitting an “of” in “transmit at least the first score information [of] the at least some....” As PANDA’s unrebutted expert testimony states, “a POSITA would readily understand the meaning and scope of the claim as written, would readily recognize that there is an obvious typographical error, and that the correction of that typographical error (the addition of an “of”) is not subject to reasonable debate based on consideration of the claim language and the specification.” Ex. A, ¶63; *id.* at ¶¶64-73. The correction is shown below:

transmit at least the first score information *[of]* the at least some of the first event information to the first viewer client device of the first plurality of viewer client devices via a third Internet communication channel between at least one first event socket of the at least one socket server and the first viewer client device of the first plurality of viewer devices;

Ex. A, ¶¶ 64-67.

Defendants cannot demonstrate by clear and convincing evidence that this obvious typographical error renders the claim indefinite. To begin, Defendants proffer no expert testimony that a POSITA would not understand the claim language or that it is subject to multiple interpretations. That alone is fatal. *Freeny v. Murphy*, No. 2:13-CV-791-RSP, 2015 WL 294102, at *14 (EDTX Jan. 21, 2015); *see also Luminati Networks Ltd. v. BIScience Inc.*, No. 2:18-CV-

00483-JRG, 2019 WL 6683268, at *9 (EDTX Dec. 6, 2019); *Akzo Nobel Coatings v. Dow Chem. Co.*, 811 F.3d 1334, 1345 (Fed. Cir. 2016). Second, this is precisely the sort of “obvious minor typographical error” that the Federal Circuit expressly permits district courts to correct, i.e. an error “whose correction is not subject to reasonable debate,” “evident from the face of the patent,” and whose determination is “made from the point of view of one skilled in the art.” *Pavo Solutions, LLC v. Kingston Tech. Co.*, 35 F.4th 1367, 1373 (Fed. Cir. 2022).

In particular, the claim first recites in [19C.1] that the “at least one socket server” “receives **“at least some of the first event information,”** and element [19C.1a] recites that the “some of the first event information” includes **“first score information.”** A POSITA would therefore understand that the **first score information** is *“of* the at least some of the first event information”—in other words, the **first score information** is included within the “some of the first event information” previously recited. Ex. A, ¶67. The claim term at-issue [19C.2] then simply states that the socket server transmits the same score information—*i.e.* it transmits **“the at least the first score information”** that is included within **“the at least some of the first event information.”** The reference to **“the at least some of the first event information”** and use of the antecedent phrase “the” confirms this element is identifying and referring back to the same information (*i.e.*, it is the same **first score information** that is included in the **“at least some of the first event information”**) described in the prior limitations [19C.1] and [19C.1a]. *Id.*

Given the claim language in these prior limitations, a POSITA would have readily understood the meaning of the claim: namely, they would have recognized that an “of” was omitted in [19C.2]—which indicates what is plain from the context of those prior-appearing limitations: that reference in [19C.2] to the “first score information” is precisely the same “first score information” that the prior limitation indicated was included within the “at least some of the first event information” recited in [19C.1.a]. Ex. A, ¶¶67-68.

Other claim terms confirm that this is a clear typographical error that would be understood to the omission of the term “of.” For example, the claim term [19C.3] includes essentially the same term for the *second* event information/score information as the *first* event information/score information above [19C.2], except that the limitation includes the “of” to indicate that the score information is the same “second score information” that is part of “some of the second event information” recited above: “transmit at least the **second score information** *of* the **at least some of the second event information** to the first viewer client device.” A POSITA reading the claims would therefore recognize the similarity of the claim terms and structure, and further understand the meaning of the first term (*i.e.*, *first* event information/score information term) with or without the obvious correction of the omitted “of” in the term at-issue. Ex. A, ¶70.

This understanding is also confirmed by the specification. For example, the specification’s discussion of Figure 2 recites the transmission of the “first score information,” which is included within “at least some of the first event information (502A)” to the first viewer client device 200A. This portion of the specification makes clear that the “first score information” is included within (*i.e.* is “of”) the at least some of the first event information that is transmitted to the socket server, which in turn transmits that information to the first viewer client device. Ex. A, ¶¶71-72.

3. “germane” (’697 Patent cls. 1, 19, 23, 27; ’687 Patent cls. 1, 19, 23, 27; ’218 Patent cls. 1, 4, 12, 16)

Defendants allege that this term is indefinite because “event information ‘germane’ or ‘relating’ to a sporting event ... does not inform a POSITA of its scope with reasonable certainty.” However, “germane” is a common term that a POSITA would have no problem understanding. Defendants do not contend that the patents use the term inconsistently with its ordinary meaning, and fail to submit any evidence that a POSITA would be confused by this term.

Indeed, Defendants concede that the specification describes the obvious: *i.e.*, information

like “score information” is “germane” to the event. *See, e.g.*, ’697 Patent, 9:45-46. But they nevertheless contend that because the patents lists other information, but do not specify whether that information is “germane” to the event, a POSITA would be confused as to whether things like “one or more of team information (e.g., team names, abbreviations and/or logos), score information (e.g., with essentially real-time score updates synchronized with the video-based commentary), player information, venue information, game status information (e.g., on-base, at-bat, timeouts, fouls, pole position, yards-to-go, yards-to-goal, down), team statistics, player statistics and the like” are germane to the event. Citing ’697 Patent, 4:41–5:6. But the above citations neither redefine “germane” nor create confusion as to whether such information is germane. A POSITA would have no issue determining what information is relevant to each event.

4. Terms Defendants Did Not Disclose As Indefinite

For the following terms, Defendants did not allege these terms were indefinite in their P.R. 3-4 disclosures or provide an explanation for the basis for their contention as required by the local rules. Exs. 13, pp. 57-72; 20, pp. 62-78. Any arguments that this term is invalid for indefiniteness has therefore been waived. Nevertheless, these arguments still fail for the following reasons.

- a) “the plurality of media sources comprises: at least one of: at least one real-time messaging protocol (RTMP) media server ... ; and at least one web real time communication (WebRTC)” (’697 Patent cls. 10, 17, 26; ’687 Patent cls. 10, 17, 26)

The meaning of this term is clear on its face. The plain language states that the plurality of media servers includes “at least one of” and then lists two types of servers: one (or more) real-time messaging (RTMP) media server and one (or more) web real time communication (WebRTC). Since Defendants did not provide any basis for why they contend a POSITA would not understand the meaning of this term, it is unclear how this term could be found to be indefinite. Indeed, the only support they list in the JCCS is the claims themselves. Dkt. 124, 29. And again, Defendants

had no issue understanding this term in their IPRs petitions. Ex. 26, p. 37.

- b) “requests ... only the first HLS file suite ...” / “no other HLS file suite ...”
(’697 Patent cls. 15, 17; ’687 Patent cls. 15, 17)

The meaning of this term is clear on its face. Since Defendants did not provide any basis for why they contend a POSITA would not understand this term, it is unclear it could be found to be indefinite. And again, Defendants had no issue understanding this term in their IPRs petitions. Ex. 26, p. 37. In short, Defendants cannot meet their burden of showing the claim is indefinite.

- c) “first broadcaster client device” / “second broadcaster client device” (’697 Patent cl. 12; ’687 Patent cl. 12)

The meaning of this term is clear on its face. Since Defendants did not provide any basis for why they contend a POSITA would not understand the meaning of this term, it is unclear how this term could be found to be indefinite. To the extent they argue that these term lacks antecedent basis, the reference to “the” first/second broadcaster client device does not create any ambiguity because a POSITA would simply understand that the system includes those additional devices *Bose Corp. v. JBL, Inc.*, 274 F.3d 1354, 1359 (Fed. Cir. 2001) (holding that despite the absence of explicit antecedent basis, “If the scope of a claim would be reasonably ascertainable by those skilled in the art, then the claim is not indefinite.”). Again, Defendants had no issue understanding this term in their IPRs petitions. Ex. 26, pp. 54-62. Defendants cannot meet their burden.

- d) “digital content corresponding to the first event information” (’088 Patent cls. 1, 5, 8, 13, 18, 24, 29, 30)

The meaning of this term is clear on its face. Since Defendants did not provide any basis for why they contend a POSITA would not understand the meaning of this term, it is unclear how this term could be found to be indefinite. Again, Defendants had no issue understanding this term in their IPRs petitions. Ex. 18, p. 40.

- e) “the at least one first display of the first client device” (’088 Patent, cls. 13, 24)

The plain reading of the claim makes clear that there is a minor typographical error such that the “*first* client device” should actually be the “*second* client device.” Indeed, claim element E) begins by referencing “transmitting first instructions to a *second* client device,” and the rest of the elements all occur on the “second client device.” ’088 Patent, cls. 13, 24. Thus, the reference to the “first client device” in this limitation is a clear typographical error and not subject to reasonable debate. Defendants fail to submit an expert declaration to the contrary. Again, Defendants had no issue understanding this term in their IPRs petitions. Ex. 18, pp. 52-53.

- f) “wherein the second instructions transmitted by the webserver cause the third client device to: connect to the second media server endpoint to receive, on a fourth communication channel between the first media server endpoint and the third client device, the first copy of the composite outgoing stream” (’088 Patent cl. 31)

The plain reading of the claim makes clear that there is a minor typographical error such that the second reference to a “first media server” should be the “second media server.” Indeed, as shown above, the claim language immediately preceding the reference to the “first media server” expressly states “connect to the *second* media server endpoint to receive.” ’088 Patent, cl. 31. Thus, the reference to the “first media server” in this limitation is a clear typographical error and not subject to reasonable debate. Defendants fail to submit an expert declaration to the contrary. Again, Defendants had no issue understanding this term in their IPRs petitions. Ex. 18, p. 55.

VI. CONCLUSION

Accordingly, the Court should reject Defendants’ constructions and afford the disputed terms their plain and ordinary meaning or construe the terms as proposed by PANDA.

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CERTIFICATE OF SERVICE

The undersigned hereby certifies that all counsel of record who are deemed to have consented to electronic service are being served with a copy of this document via the Court's CM/ECF system on March 21, 2025.

/s/ Christopher C. Campbell